SBA

# Business Basics

P94

# The Profit Plan

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# THE PROFIT PLAN

## INSTRUCTOR'S GUIDE SHEET

### Booklet Description

This booklet has been developed to teach participants the following:

- Develop a forecast for sales and gross profit.
- Prepare budgets for operating expenses.
- Prepare an estimate of net profit.
- Consider internal and external factors that could affect sales and costs in the coming period.
- Use a profit plan as a basis for reviewing performance on a continuing basis.

### Supplementary Instruction

- With the client, divide sales into logical categories such as major accounts, products, or departments as a basis for preparing a sales forecast.
- Develop a sales forecast, considering known internal and external factors such as product line changes, pricing actions, differing customer requirements, and the like.
- Consider the effect of pricing decisions upon sales volume.
- Analyze cost data, considering expected price increases and the effect of any managerial actions.
- Prepare a profit plan in a format that will permit the client to evaluate his or her operations on a monthly basis with a minimum of review.

### Note

Prior to taking this booklet, the participant should have completed the introductory booklets, Understanding Costs and Cost Control.

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# INTRODUCTION

Profit planning is simply the development of your operating plan for the coming period. Your plan is summarized in the form of an income statement that serves as your sales and profit objective and your budget for cost.

## How Is It Used?

The profit plan is used in the following ways:

- Evaluating operations. Each time you prepare an income statement, actual sales and costs are compared with those you projected in your original profit plan. This permits detection of areas of unsatisfactory performance so that corrective action can be taken.

- Determining the need for additional resources such as facilities or personnel. For example, the profit plan may show that a sharp increase in expected sales will overload the company's billing personnel. A decision can then be made to add additional invoicing personnel, to retain an EDP service, or to pursue some other alternative.

- Planning purchasing requirements. The volume of expected sales may be more than the business' usual suppliers can handle or expected sales may be sufficient to permit taking advantage of quantity discounts. In either case, advance knowledge of purchasing requirements will permit taking advantage of cost savings and ensure that purchased goods are readily available when needed.

- Anticipating any additional financing needs. With planning, the search for needed funds can begin as early as possible. In this way, financial crises are avoided and financing can be arranged on more favorable terms.

## Advantages of Profit Planning

Profit planning offers many advantages to your business. The modest investment in time required to develop and implement the plan will pay liberal dividends later. Among the benefits that your business can enjoy from profit planning are the following:

- Performance evaluation. The profit plan provides a continuing standard against which sales performance and cost control can quickly be evaluated.

- Awareness of responsibilities. With the profit plan, personnel are readily aware of their responsibilities for meeting sales objectives, controlling costs, and the like.

- Cost consciousness. Since cost excesses can quickly be identified and planned expenditures can be compared with budgets even before they are incurred, cost consciousness is increased, reducing unnecessary costs and overspending.

- Disciplined approach to problem-solving. The profit plan permits early detection of potential problems so that their nature and extent are known. With this information, alternate corrective actions can be more easily and accurately evaluated.

- Thinking about the future. Too often, small businesses neglect to plan ahead: thinking about where they are today, where they will be next year, or the year after. As a result, opportunities are overlooked and crises occur that could have been avoided. Development of the profit plan requires thinking about the future so that many problems can be avoided before they arise.

- Financial planning. The profit plan serves as a basis for financial planning. With the information developed from the profit plan, you can anticipate the need for increased investment in receivables, inventory, or facilities as well as any need for additional capital.

- Confidence of lenders and investors. A realistic profit plan, supported by a description of specific steps proposed to achieve sales and profit objectives, will inspire the confidence of potential lenders and investors. This confidence will not only influence their judgment of you as a business manager, but also the prospects of your business' success and its worthiness for a loan or an investment.

## Limitations of Profit Planning

Profit plans are based upon estimates. Inevitably, many conditions you expected when the plan was prepared will change. Crystal balls are often cloudy. The further down the road one attempts to forecast, the cloudier they become. In a year, any number of factors can change, many of them beyond the control of the company. Customers' economic fortunes may decline, suppliers' prices may increase, or suppliers' inability to deliver may disrupt your plan.

The profit plan requires the support of all responsible parties. Sales quotas must be agreed upon with those responsible for meeting them. Expense budgets must be agreed upon with the people who must live with them. Without mutual agreement

on objectives and budgets, they will quickly be ignored and serve no useful purpose.

Finally, profit plans must be changed from time to time to meet changing conditions. There is no point in trying to operate a business according to a plan that is no longer realistic because conditions have changed.

## Advantages vs. Disadvantages

Despite the limitations of profit planning, the advantages far outweigh the disadvantages. A realistic plan, established yearly and reevaluated as changing conditions require, will provide performance guidelines that will help you control every aspect of your business with a minimum of analysis and digging for financial facts.

## Booklet Objectives

In this booklet, you will learn how to do the following:

- Develop a forecast for sales and gross profit, considering all of the various internal and external factors that are relevant to the forecast.
- Develop budgets for operating expenses to quickly detect excessive expenses so that corrective action can be taken and purchasing commitments held within budgetary limits.
- Estimate net profit so that you can determine whether or not the projected return on your investment is satisfactory. You will also be able to determine how much cash will be generated from operations either for reinvestment in the business or to compensate owners for their investment.

# FORECASTING SALES AND GROSS PROFIT

## Beginning of Profit Plan

Development of your profit plan should usually begin with a forecast of your expected sales and gross profit for the coming year. The sales and gross profit must be considered together since they are so closely interrelated. Gross profit percentages are determined by pricing policy, which also affects expected sales volume. A decision to increase the expected gross profit percentage will usually tend to decrease expected sales, while reducing the expected gross profit percentage should increase sales.

A second major reason for beginning the profit plan with a sales forecast is that the volume of expected sales often determines a number of other factors such as the following:

- Expected changes in variable expenses, those expenses that tend to change in direct proportion to changes in sales. These could include expenses such as sales commissions or delivery costs.

- The impact of the added sales volume on the various fixed costs of operating your business. These costs, by definition, do not tend to vary in direct proportion to changes in sales volume. However, substantial increases in sales over an extended period can force an increase in many fixed expenses. For example, a sales increase realized through the addition of many new accounts could affect bookkeeping and credit costs.

- The ability of present resources such as storage space, display area, delivery capability, or supervisory personnel to accommodate the added volume.

- The need for funds to invest in increased inventory or accounts receivable to accommodate sales increases.

- Cash generated from operations to meet current operating needs as well as expansion requirements, debt repayments, and owners' compensation.

## Realism

A realistic sales forecast must rely on careful analysis of market potential and the ability of your business to capture its share of this potential. The forecast should not be based upon "what you would <u>like</u> to do" or "what you <u>hope</u> to do." It must be "what you <u>can</u> do" and "what you <u>will</u> do."

Any forecast of a sales increase must be supported by realistic expectations for stronger market demand and specific marketing steps that will be taken to capture a share of this market.

The key to successful forecasting is realism. You only fool yourself if you reject reality in forecasting. Such forecasts serve neither as a realistic planning basis nor as a reliable means of performance evaluation.

Your forecast can be the basis for important decisions such as decisions to add personnel, lease additional facilities, or increase promotional costs. If these decisions are based upon unrealistic sales expectations, any money expended on them will be wasted.

Forecasts are often presented to lenders or potential investors to guide them in their decisions. If they lack confidence in your forecast, they will certainly be reluctant to commit their funds to your business.

Every forecast should be supported by carefully considered, specific action plans. It is inadequate to forecast a sales increase of 20% or 30% without plans for specific actions to achieve the increase. These actions could include the introduction of new products, opening of new branches, market expansion, commitments from new customers, increased requirements from existing customers, additional salesmen, or an intensified promotional effort to attract new customers.

## Analyzing Current Sales and Gross Profit

Your sales and gross profit forecast begins with analysis of current performance. Sales are usually divided into various categories. Each category is examined individually to determine expected sales for the coming year.

## Selecting Sales Categories

The selection of categories will depend upon the nature of your business. For example, a food broker selling to a large number of relatively small accounts might be interested primarily in analyzing sales by product. The owner of a single retail store might choose to analyze sales by selling department, while the owner of a retail chain would probably be interested in analyzing sales by outlet. An insurance broker with several agents might categorize sales by agent. An individual wholesaler might consider sales by sales territory.

## Factors Affecting Sales

After categories have been selected and current sales divided among them, the various factors which can affect sales in each



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category must be considered. These factors could be either internal or external. Internal factors are those that you can influence. External factors are those that affect the market served by your business, but are generally beyond your control.

Internal Factors

The following are typical internal factors that could influence your sales forecast:

. Promotional plans

. Expansion plans

. Capacity restrictions

. New product introductions

. Product cancellations

. Sales force changes

. Pricing policy

. Profit expectations

. Market expansion to new customers or territories

External Factors

Among the external factors that must be considered are the following:

. Business trends

. Government policies

. Inflation

. Changes in population characteristics

. Economic fortunes of customers

. Changes in buying habits

. Competitive pressures

NOTE: Cover the correct answers and write your answers on a separate piece of paper (or in the book). Check your answers and review weak areas. Do all the exercises the same way.

1. The profit plan usually begins with a forecast of sales and _____ for the coming period.

---

gross profit

---

2. Which classification of costs is more likely to be affected by any planned increase in sales? (FIXED/VARIABLE)

---

VARIABLE

---

3. Costs that tend to increase in direct proportion to changes in sales volume are called (VARIABLE/FIXED) expenses.

---

VARIABLE

---

4. Costs that tend to remain the same despite changes in sales volume are called _____ costs.

---

fixed

---

5. Sales commissions would probably increase as a result of a sales increase and would therefore be considered a _____ expense.

---

variable

---



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6. Under which of the following conditions would an increase in sales cause an increase in a fixed expense such as rent?

   a. Sales revenue is expected to increase because of a price increase.

   b. The present facility is too small to accommodate the storage of any additional inventory.

---

   b. The present facility is too small to accommodate the storage of any additional inventory.

---

7. Under which of the following conditions is a sales increase more likely to cause a fixed expense to increase?

   a. an increase of 10% or 20% for two or three months
   b. a doubling of sales for the entire year

---

   b. a doubling of sales for the entire year

---

8. Why must forecasts of sales and gross profit be considered together?

---

   Gross profit affects pricing which, in turn, affects sales volume.

---

9. Increasing your expected gross profit percentage would probably (INCREASE/DECREASE) your expected sales.

---

   DECREASE

---

10. The owner of a small chain of film processing shops would probably analyze sales by _____.

---

shop

---

11. The owner of a building supply house with several sales representatives would probably analyze sales by _____.

---

sales representative

---

12. The two types of factors that must be considered in forecasting are _____ and _____.

---

external
internal

---

13. Management decisions that affect sales are examples of _____ factors.

---

internal

---

14. Economic conditions and competitors' plans are examples of _____ factors that affect the sales forecast.

---

external

---

15. Which of the following are internal factors that affect the sales forecast?

a. new product introduction
b. inflation
c. pricing policy changes
d. new government regulations
e. market expansion plans

---

a. new product introduction
c. pricing policy changes
e. market expansion plans

---

16. Which of the following are external factors that affect the sales forecast?

a. promotional plans
b. changes in sales force
c. economic trends
d. changes in customers' needs
e. changes in buying habits

---

c. economic trends
d. changes in customers' needs
e. changes in buying habits

---

* * * * *

Analyzing Gross Profit Percentages

It is often useful to begin a sales forecast with an examination of your current gross profit percentage (markup percentage or gross profit percentage). The gross profit percentage is usually the best indicator of pricing policy which can have significant impact on sales volume. To some extent, the gross profit percentage will also reflect the buying economies of your business. However, the range over which costs of purchased goods will vary is not ordinarily as wide as the possible range of prices you may seek for your products.

Three Bases of Comparison

Examination of current gross profit percentages can indicate the need for pricing policy revisions to meet competition or closer attention to purchasing costs in order to provide extra gross profit without increasing prices.

The evaluation of gross profit percentages requires comparison of current performance with three bases:

. Objectives originally set for the current year, if available

. Other businesses in the same industry

. Results of prior years

Comparison with objectives permits you to determine how well you have done compared with your original expectations. Assuming that these objectives were realistic, this is often the best single performance indicator. Deviations from objectives can quickly be identified and explored in detail to determine the cause of the deviation.

Comparison with industry averages permits identification of areas where the experience of similar businesses indicates room for improvement in your own.

Unfortunately, businesses are often too quick to dismiss the applicability of industry averages to their own operation, claiming that "Our circumstances are different." Such an attitude is self-defeating. It prevents you from taking advantage of the experience of others to improve your own sales and profit. A far more productive attitude is to say, "If everybody else can realize a gross profit of x percent, then we should be able to." Until specific circumstances are identified that make it impossible for your business to be consistent with industry averages, every attempt should be made to bring performance in line with the experience of others.

Comparison of current operations with performance in prior periods permits detection of trends so that progress, or the lack of it, can be identified. It also permits evaluation in light of those specific considerations that may be unique to your business. For example, if your gross profit as a percentage of sales is low compared with the industry, analysis of your historic performance may reveal the cause of this apparent deficiency such as reliance upon a major customer where severe competition restricts the available gross profit percentage.

* * * * *

1. Identify three bases with which current performance can be compared to identify potential areas of profit improvement.

   1.
   2.
   3.

---

historic performance
industry averages
objectives

---

2. To determine trends in its own performance, the business would rely upon:

   a. comparison with its performance in prior periods
   b. comparison with industry averages
   c. comparison with objectives

---

   a. comparison with its performance in prior periods

---

3. Comparison with industry averages is seldom useful because every business is unique. (TRUE/FALSE)

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   FALSE

---

4. Comparison of performance with objectives is often most useful because realistic objectives:

   a. are based entirely upon historic performance
   b. combine historic performance with industry averages

---

   b. combine historic performance with industry averages

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* * * * *

Evaluating Gross Profit Percentages

Refer to the table on page 13, which is an analysis of gross profit percentages realized by Western Appliances in 1979. Percentages are shown for cost of sales, gross profit, total expenses, and profit before taxes as follows:

. 1979 actual
. 1978 actual
. Industry average
. 1979 objective

Each basis of comparison provides a different viewpoint of the company's operations.

TABLE 1

WESTERN APPLIANCES, INC.
PROFIT PERCENTAGE ANALYSIS

| | 1979 ACTUAL | 1978 ACTUAL | INDUSTRY AVERAGE | 1979 OBJECTIVE |
|---|---|---|---|---|
| Sales | 100.0% | 100.0% | 100.0% | 100.0% |
| Cost of Sales | 80.0% | 80.5% | 81.8% | 80.7% |
| Gross Profit | 20.0% | 19.5% | 18.2% | 19.3% |
| Total Expenses | 17.9% | 18.6% | 14.7% | 17.2% |
| Profit Before Taxes | 2.1% | 0.9% | 3.5% | 2.1% |

In 1979, Western Appliances' gross profit was 20.0% of sales. This represented an improvement over their 1978 performance of 19.5%, the industry average of 18.2%, and their 1979 objective of 19.3%. By any of these measures, this should be considered favorable. Apparently, they were able to control their purchasing costs and realize adequate prices in order to improve upon their own previous gross profit performance as well as the industry average.

Conflicts

Sometimes financial analysis can lead to conflicting conclusions derived from identical facts. Comparing Western Appliances' 20.0% gross profit with the 18.2% industry average could raise questions. If Western Appliances were more competitive in its pricing, could it capture a larger market share? A reasonable answer to this question would depend upon thorough knowledge of their operations and the experience of their sales personnel in dealing with specific customers. Perhaps their pricing is fully competitive in their area or local retailers are willing to pay slightly more because of the superior services they offer. If this is the case, price cutting might only trim profit margins with no realistic hope of additional sales volume to offset the effects of the price reduction.

On the other hand, if their gross profit percentage is below that of the industry, a number of other questions would be raised, such as the following:

. Are they purchasing at prices that are too high to provide an adequate gross profit?

. Is their pricing structure so low that adequate gross profit margins cannot be attained?

. Are salesmen too quick to cut prices?

. Is their marketing effort too heavily concentrated in those product lines that offer a relatively low gross profit percentage?

. Is their marketing effort directed toward those high-volume accounts that are so highly competitive that gross profit must be trimmed to an unrealistically low level?

* * * * *

1. Gross profit percentage is primarily an indication of:

   a. pricing policy
   b. marketing effort
   c. sales success

---

   a. pricing policy

---

2. Besides pricing policy, the gross profit percentage is an indication of:

   a. promotional costs
   b. control of purchasing costs
   c. market share

---

   b. control of purchasing costs

---

3. A gross profit percentage equal to the industry average or lower would usually indicate (PREMIUM/COMPETITIVE) performance.

---

   COMPETITIVE

---

* * * * *

## Analysis of Sales Performance

Table 2, shown below, analyzes the 1979 sales of Western Appliances by account. Actual sales, gross profit, and the gross profit percentage are shown individually for major accounts and as a group for smaller accounts. These are reported on the bottom line and represent 50 small retailers served by Western Appliances.

TABLE 2

WESTERN APPLIANCES, INC.
SALES FORECAST, 1980

| | 1979 ACTUAL | | | 1980 FORECAST | | |
|---|---|---|---|---|---|---|
| ACCOUNT | SALES | GROSS PROFIT | % | SALES | GROSS PROFIT | % |
| Giant Discount | $ 300,000 | $ 45,000 | 15.0% | $ 323,500 | $ 45,300 | 14.0% |
| Appliance Mart | 150,000 | 27,000 | 18.0 | 174,000 | 31,300 | 18.0 |
| TV Center | 120,000 | 21,600 | 18.0 | 159,000 | 23,900 | 15.0 |
| Whitney Brothers | 80,000 | 15,200 | 19.0 | 100,000 | 20,000 | 20.0 |
| Packer Electronics | 70,000 | 14,000 | 20.0 | 40,400 | 8,100 | 20.0 |
| Consumers Outlet | 40,000 | 7,200 | 18.0 | 50,000 | 9,000 | 18.0 |
| Other (50 stores) | 440,000 | 110,000 | 25.0 | 553,100 | 142,400 | 25.7 |
| Total | $1,200,000 | $240,000 | 20.0% | $1,400,000 | $280,000 | 20.0% |

Let us consider Appliance Mart, one of the major accounts shown. In 1979, Western Appliances' sales to Appliance Mart were $150,000. These sales generated gross profit of $27,000, or 18.0% of sales.

In 1980, Western Appliances expects a general price increase of 5% with no change in the discount structure available to them from their suppliers.

Appliance Mart's business in 1980 is expected to be affected only by general economic conditions such as the 5% price increase and an expected 10% industry growth in consumer demand for electrical appliances.

Appliance Mart operates a chain of discount stores in an economically stable suburban area. For 1980, they have no plans to add or eliminate any stores. There are no changes expected in Western Applianoes' relationship with them that would materially affect sales.

Therefore, the only factors affecting the sales forecast for Appliance Mart would be the planned 5% price increase and the



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general 10% increase in demand. Sales to Appliance Mart in 1980 could then be forecast as follows:

| | |
|---|---|
| 1979 Sales | $150,000 |
| + 5% Price Increase | 7,500 |
| = Subtotal | $157,500 |
| + 10% Demand Increase | 15,750 |
| = Total | $173,250 |

This amount, $173,250, has been rounded to $174,000 and entered in the 1980 sales forecast column.

Since there is no planned change in Western Appliances' discount structure from its suppliers, nor is there any indication that competition for Appliance Mart's business will be any more or less severe, Western Appliances probably should assume that gross profit as a percentage of these sales will remain at 18.0%, the 1979 level. The gross profit expected on these sales could then be calculated as follows:

$$\$174,000 \times .180 = \$31,320$$

This amount has been rounded to $31,300 and entered in the gross profit forecast column.

* * * * *

1. Refer to Table 2 on page 15 to develop a 1980 sales and gross profit forecast for TV Center, shown on the third line. In 1979, sales to TV Center were $120,000. In 1980, this should increase by the 5% general price increase to $_____.

---

$126,000 ($120,000 x .05 = $6,000; $120,000 + $6,000 = $126,000)

---

2. Although the industry expects a general 10% increase in consumer demand in 1980, the stores operated by TV Center are located in areas showing subpar economic growth. Therefore, their customer demand is only expected to increase by 5%. The sales forecast for TV Center should then be adjusted to $_____.

---

$132,300 ($126,000 x .05 = $6,300; $126,000 + $6,300 = $132,300)

---

3. TV Center is adding an additional store at the beginning of 1980. This store is expected to increase their total sales by 20%. The 1980 sales forecast of Western Appliances to TV Center should now be adjusted to $_____.

---

$159,000 ($132,300 x .20 = $26,460; $132,300 + $26,460 = $158,760, rounded to $159,000)

---

4. Due to the growth of TV Center, more wholesalers are competing aggressively for their business. Therefore, Western Appliances feels that it will probably have to lower its gross profit percentage in order to maintain its traditional share of the business. Assume that the gross profit percentage is reduced to 15.0%, as shown in the 1980 forecast. The gross profit, in dollars, expected from TV Center in 1980 would then be $_____.

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$23,900 ($159,000 x .15 = $23,850, rounded to $23,900)

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* * * * *

## Subdividing Sales Categories

It is often useful to subdivide sales into more detailed classifications in order to develop a more precise forecast such as potential sales to a single customer. As an example, refer to Table 3 on page 18, Western Appliances' sales summary by product line to Giant Discount, its major customer in 1979. Sales, gross profit, and the gross profit percentage are shown by product line so that each line may be considered separately to determine a realistic forecast for 1980.

Development of the 1980 forecast will assume that Giant Discount's various stores are located in areas that are representative of the general economy and therefore will reflect the industry's expected sales growth of 10%; the price increase of 5% will have no significant effect on Giant Discount's sales; and competition among appliance wholesalers for Giant Discount's business will prevent Western Appliances from increasing its gross profit percentage in any product line.

TABLE 3

WESTERN APPLIANCES, INC.
CUSTOMER SALES ANALYSIS — GIANT DISCOUNT

| | 1979 ACTUAL | | | 1980 FORECAST | | |
|---|---|---|---|---|---|---|
| PRODUCT LINE | SALES | GROSS PROFIT | % | SALES | GROSS PROFIT | % |
| Television | $160,000 | $16,000 | 10.0% | $184,800 | $18,500 | 10.0% |
| Automotive radios | 20,000 | 6,000 | 30.0 | - | - | - |
| Table radios | 30,000 | 6,000 | 20.0 | 34,700 | 6,900 | 20.0 |
| Stereo | 40,000 | 7,000 | 18.0 | 46,200 | 8,300 | 18.0 |
| Small appliances | 50,000 | 10,000 | 20.0 | 57,800 | 11,600 | 20.0 |
| Total | $300,000 | $45,000 | 15.0% | $323,500 | $45,300 | 14.0% |

The first product line on Table 3, television sales, could then be forecast as follows:

| | |
|---|---|
| 1977 Sales | $160,000 |
| + 5% Price Increase | 8,000 |
| = Subtotal | $168,000 |
| + 10% Demand Increase | 16,800 |
| = Total | $184,800 |

Assuming that the gross profit percentage of 10.0% on television sales is maintained in 1980, the forecast for gross profit can then be calculated as follows:

$184,800 x .100 = $18,480, rounded to $18,500

Giant Discount plans to discontinue its sales of automotive radios in 1980. Therefore, sales, gross profit, and the gross profit percentage for all are shown as zero on Table 3.

Sales, gross profit, and gross profit percentages have all been determined for the remaining product lines and shown on the 1980 forecast on Table 3. You will note that the gross profit as a percentage of total sales in the 1980 forecast, 14.0%, is well below the 1979 experience of 15.0% even though the gross profit on each product line remains the same. This is due to the elimination of the highly profitable automotive radio line which produced a 30% gross profit but is being discontinued from Giant Discount's stores. In fact, the net effect of this discontinuation is that Western Appliances will realize additional gross profit of less than $1,000 on sales to Giant Discount despite a sales increase of almost $24,000. This important fact probably would not have been revealed if sales to Giant Discount had not been subdivided into individual product lines for analysis.

This negligible increase in gross profit will probably be more than offset by normal cost increases in various expense accounts required to handle Giant Discount's business in 1980. At this point, the owners of Western Appliances would be well advised to take a hard look at their pricing strategy to see if more favorable prices can be realized in any product line without any significant sales loss so that the gross profit earned from this, its largest account, can be improved.

* * * * *

1. In 1979, Western Appliances' sales to Packer Electronics were $_____. (Refer to Table 2 on page 15.)

---

$70,000

---

2. Gross profit on these sales was $_____, or _____% of sales.

---

$14,000
20% ($14,000 ÷ $70,000)

---

3. In 1980, Packer Electronics plans to close one-half of its retail outlets. This will reduce expected sales from $_____ to $_____.

---

$70,000
$35,000

---

4. The expected price increase of 5% should increase sales revenue from $35,000 to $_____.

---

$36,750 ($35,000 x .05 = $1,750; $35,000 + $1,750 = $36,750)

---

5. The expected 10% increase in demand should increase sales from $36,750 to $_____.

---

$40,400 ($36,750 x .10 = $3,675; $36,750 + $3,675 = $40,425, rounded to $40,400)

---

6. At a gross profit percentage of 20%, Western Appliances should realize a gross profit of $_____ on sales to Packer Electronics in 1980.

---

$8,100 ($40,400 x .20 = $8,080, rounded to $8,100)

---

* * * * *

## EXPENSE BUDGETS

### Forecasting Expenses

After a realistic forecast has been developed for sales and gross profit, expenses for the coming year must be estimated in order to establish expense budgets and to determine expected operating profit.

### Comparisons

As with the forecast of sales and gross profit, expense estimating begins with a review of the current year's performance based upon comparison with the following indicators:

. Performance in prior periods

. Industry averages

. Objectives established for the current year

### Expenses As a Percentage of Sales

For purposes of comparison, it is often useful to express each expense as a percentage of total sales. This has been done on Exhibit 1 for Western Appliances' 1979 expenses. For example, the owner's salary, $24,000, represents 2.0% ($24,000 ÷ $1,200,000) of 1979 sales.

### Comparing Variable Expenses

The use of percentages as a basis of comparison and forecasting is particularly applicable when analyzing variable expenses. Variable expenses are those that tend to change as a result of changes in sales volume. For example, if salesmen's commissions are based upon a percentage of sales, the total dollar amount of commissions earned would increase as sales increase. If sales in a month were 20% higher than expected, commissions paid would also increase 20% as a direct result of the higher sales volume.

### Comparing Fixed Expenses

On the other hand, fixed expenses are not directly affected by short-term variations in sales volume. Therefore, a 20% increase in the dollar amount of any fixed expense such as salaries or rent would normally be considered unacceptable even if sales for the period increased by 20%. When comparing fixed expense levels with objectives or from one period to another, it is more realistic to make comparisons in absolute dollars rather than in percentages.

A business has sales and rent expense in January, February, and March as follows:

| MONTH | SALES | RENT EXPENSE $ | RENT EXPENSE % SALES |
|---|---|---|---|
| January | $100,000 | $1,000 | 1.00% |
| February | 80,000 | 1,000 | 1.25 |
| March | 125,000 | 1,000 | 0.80 |

As a percentage of sales, rent expense was high in February and low in March. However, this does not indicate that control of this expense was more or less effective in either month. It simply reflects the changes in sales volume. In all three cases, the actual rent expense was $1,000.

Long-Range Considerations

Despite the shortcomings of using percentages to evaluate fixed expense control within the business from month to month, they can be useful when making long-term comparisons or comparisons with industry averages. These averages normally express expenses as percentages of sales, regardless of whether they are fixed or variable.

For example, assume that a business found that its rent expense as a percentage of sales was 2% compared with an industry average of 1%. This differential would have to be offset by better than average performance in gross profit or other expense classifications if the business expects to realize net profit equal to its industry average. Perhaps the reason for the high percentage is due to an exorbitant rental expense, or it may be caused by inadequate sales. In either case, certain questions must be answered. These could include the following:

. Are we renting more space than we need?

. Is our space too expensive for our requirements?

. Could a less elaborate facility be located that would be adequate for our needs?

. Would a less costly location be sufficient?

. Is our space utilization inefficient?

. Will expected sales increases be handled without renting additional space? Will this bring our rent expense percentage in line with the industry?

. Can the terms of our lease be renegotiated?

Similarly, when comparing long-term performance with prior periods, the use of fixed expense percentages can be helpful. For example, if you found that warehouse salaries jumped from 2% of sales to 4%, a number of important questions would be raised. These could include the following:

. Are we now using too many warehouse personnel?

. Are warehouse personnel less efficient?

. Has ineffectiveness crept into the warehouse layout or operating procedure?

. Are warehouse workers overpaid?

. Is warehouse supervision inadequate?

* * * * *

1. Identify the three bases of comparison for evaluating expenses.

   1.
   2.
   3.

---

   prior period performance
   industry averages
   objectives

---

2. Expenses that tend to vary as a direct result of changes in sales volume are called _____ expenses.

---

   variable

---

3. Expenses that tend to be unaffected by changes in sales volume are called _____ expenses.

---

   fixed

---

4. Variable expense comparisons are more valid when considered on:

   a. an actual dollar basis
   b. a percentage basis

---

   b. a percentage basis

---

5. Short-term analysis of fixed expenses is usually more valid when comparisons are based upon:

   a. an actual dollar basis
   b. a percentage basis

---

   a. an actual dollar basis

---

6. In a month when sales were 20% above the objective, sales commissions were also 20% above the objective. This probably indicates a lack of control over sales commission expense in the month. (TRUE/FALSE)

---

   FALSE (Sales commissions would ordinarily be a variable expense and would be expected to increase in proportion to sales increases.)

---

7. In a month when sales were 20% above the objective, clerical salaries also increased 20%. This probably indicates a lack of control over clerical salaries during the month. (TRUE/FALSE)

---

   TRUE (Although this may reflect increased invoicing activity, this would only be a portion of the clerical staff's duties. Therefore, this expense should not increase in direct proportion to sales increases. Chances are, the increase is largely due to unnecessary overtime or the use of extra personnel.)

---

8. Analysis of fixed expenses is more valid when making (SHORT/LONG)-term comparisons.

---

LONG

---

9. Analysis of fixed expenses on a percentage basis is also useful when making comparisons with _____ averages.

---

industry

---

* * * * *

Identifying Excessive Expenses

At Western Appliances, no objectives were available for 1979 performance. Therefore, excessive expenses can be identified only by comparison with 1978 results, as shown on Exhibit 1, and, in some cases, with industry averages. These averages also appear on Exhibit 1.

Industry Average Comparisons

Comparisons with industry averages are not available in all of Western Appliances' expense accounts. However, this can be determined by examining those accounts on the company's income statement that can be combined for comparison with industry averages. For example, the industry averages on Exhibit 1 show that office salaries for the industry were 4.9% of sales. Examining the operating expense accounts at Western Appliances, the accounts that would appear to fall into this classification are the following:

| | |
|---|---|
| Salary-Office Manager | 1.4% |
| Salaries-Clerical | 1.0% |
| Salaries-Warehouse | 1.8% |

The total of these expenses, 4.2% of sales, compares favorably with the industry average of 4.9%.

* * * * *

1. When comparing fixed expenses with industry averages, comparisons are usually based upon (PERCENTAGES/ TOTAL DOLLARS).

---

PERCENTAGES

---

2. Exhibit 1 shows that Western Appliances' rent expense is 0.8% of sales. The industry average is _____% of sales.

---

0.7%

---

3. Western Appliances' rent expense as a percentage of sales is slightly (HIGHER/LOWER) than the industry average.

---

HIGHER

---

4. Western Appliances' depreciation expense as a percentage of sales compares (FAVORABLY/UNFAVORABLY) with the industry average.

---

FAVORABLY (0.5% vs. 0.5%)

---

5. Identify those accounts on Exhibit 1 that probably should be combined for comparison of Western Appliances' selling and delivery expense with the industry average.

1.
2.
3.
4.

---

Salaries-Salesmen
Commissions-Salesmen
Advertising and Promotion
Freight

---

6. Western Appliances' 1979 total expense in these four accounts is _____% of sales.

---

5.4% (1.0% + 2.0% + 1.1% + 1.3%)

---

7. Western Appliances' selling and delivery expense compares (FAVORABLY/UNFAVORABLY) with the industry average.

---

FAVORABLY (5.4% vs. 7.6%)

---

* * * * *

Comparison with Previous Periods

The information given on Exhibit 1 permits comparison of all expenses in 1979 with 1978 results.

The only variable expense at Western Appliances in 1979 is salesmen's commissions. These represented 2.0% of sales in both 1978 and 1979. Therefore, they would not appear to be excessive.

In the fixed expense accounts, sharp increases could be noted in the following accounts and would warrant review and possible corrective action.

| ACCOUNT | 1979 | 1978 |
|---|---|---|
| Salary-Owner | $24,000 | $20,000 |
| Salaries-Warehouse | 22,000 | 18,000 |
| Salaries-Clerical | 12,000 | 10,000 |
| Employee Benefits | 8,000 | 6,000 |
| Utilities | 4,000 | 3,000 |
| Telephone | 4,000 | 2,000 |
| Supplies | 2,000 | 1,000 |
| Travel and Entertainment | 13,000 | 10,000 |

Comparing Western Appliances' 1979 fixed expenses with its experience in 1978, significant increases are noted in almost every account. Some of these increases should be regarded with more concern than others and therefore given prompt attention. Reasons for the increases and possible corrective action must be determined.

Some increases were probably unavoidable, having been dictated by contract, legal requirements, or price increases beyond the company's control. Others could probably be reduced with closer control. For example, travel and entertainment expense jumped from $10,000 to $13,000, an increase of $3,000. This sharp increase should indicate that a closer look at all travel and entertainment expenditures is in order to determine whether or not all were necessary. Could some have been avoided by restricting salesmen's expense accounts? Could more economical means of travel have been used? Could the company eliminate unnecessary trips that resulted in costs far beyond any real value to the business?

Supplies expense doubled from $1,000 to $2,000 although the volume of business increased by only about 10%. This sales increase would not seem to indicate a need for such a sharp increase in supplies usage. Such an expense could be controlled by closer attention to purchasing procedures and supplies issued to employees, use of less expensive supplies where possible, and so on.

Determining Expense Budgets

Budgets for each expense must be established, considering both external and internal factors, as in sales forecasting.

From the standpoint of expense budgeting, the following would be considered internal factors:

. Corrective actions planned to bring excessive expenses in line.

. Policy changes such as new commission plans.

. Commitments such as equipment purchases, leases on new facilities, or professional service contracts.

. Planned salary increases.

. Planned changes in benefit programs.

. Additional personnel.

. Promotional plans.

External factors could include the following:

. Inflation and its effect on price increases from suppliers.

. Tax rate increases including payroll taxes, local property taxes, inventory taxes, and so on.

. Utility rate increases.

Additionally, the interrelated effects of expense increases must be considered. For example, payroll increases will increase payroll taxes and, possibly, employee benefits. Rent on larger facilities can also involve additional utilities expense.

* * * * *

1. In establishing expense budgets, you must consider both external and _____ factors.

---

internal

---

2. The hiring of an additional employee is an example of a(n) (EXTERNAL/INTERNAL) factor.

---

INTERNAL

---

3. A municipal property tax increase is an example of a(n) _____ factor.

---

external

---

4. The increased expense for payroll taxes resulting from a decision to hire a new employee is an example of an:

   a. internal factor
   b. external factor
   c. interrelated effect

---

c. interrelated effect

---

* * * * *

Initial Forecast

Exhibit 1 shows Western Appliances' initial forecast for 1980 operating expenses.

. The owner's salary will be increased from $24,000 to $26,000.

. The office manager's salary will be increased from $17,000 to $18,000.

. Salesmen's salaries will remain unchanged.

. The expected sales increase will cause salesmen's commissions, 2% of sales, to increase from $24,000 to $28,000.

. Warehouse salaries will be increased about 5% from $22,000 to $23,000.

. Clerical salaries will be increased about 17% from $12,000 to $14,000.

. Payroll taxes, approximately 8% of total compensation, will increase to $10,000 as a result of the compensation increases

. Employee benefits expense is expected to increase from the present $8,000 to $9,000. This increase is dictated by increased premium costs for employees' health insurance.

. Rent expense will increase from $9,000 to $10,000 due to a tax escalator clause in the lease agreement and a proposed municipal tax increase.

. Utilities expense is expected to remain unchanged at $4,000.

. Telephone expense is expected to be reduced from $4,000 to $3,000 because of tighter controls introduced by management in response to the sharp increase in 1979.

. New controls on supplies should hold this expense at $2,000 despite price increases.

. To increase sales, the advertising and promotion budget will be increased from $13,000 to $15,000, a 20% increase.

- Through tighter control, the owner expects to restrict travel and entertainment expense to the 1979 level of $13,000 despite the general increase in travel-related costs.

- Freight expense will increase from $16,000 to $18,000 reflecting the increased sales volume and higher freight tariffs.

- Professional fees are expected to remain at $5,000.

- Depreciation expense will increase from $6,000 to $8,000 due to the addition of new receiving equipment being purchased at a cost of $10,000 and depreciated over 5 years.

- Total operating expenses will increase from $200,000 to $218,000. Profit before interest and taxes will be $62,000, an increase from $40,000 in 1979.

Reevaluating the Plan

Once an initial plan has been established, it is often useful to review it in order to identify areas of further improvement.

In the example of Western Appliances, the expected profit before income taxes, 3.2% of sales ($45,000 ÷ $1,400,000), is well above the industry average of 2.5% and no extensive reevaluation appears needed.

## SUMMARY

### Facts vs. Observations

Too often, the owners of small businesses rely upon their eyes and ears to tell them whether or not the performance of their business is up to par. Unfortunately, our eyes and ears often betray us. The sales representative with the glib tongue and quick wit may appear to be your star performer while the facts, actual sales and profit, may show that someone else is doing a far better job. The secretary who constantly appears busy may be far less efficient than another who works in a more organized fashion with fewer errors and less need for duplicate effort.

There are also many aspects of a business that our eyes and ears cannot always sense. Changes in the market, shifts in customers' economic fortunes, and gradual but seemingly irreversible increases in costs can develop into crises unless they are detected at an early stage and effective action is taken promptly.

### Performance Evaluation

The establishment of a profit plan permits you to evaluate performance in your business based upon facts, not upon random observations. Certainly, there is no substitute for the "gut feel" of the small business owner in making these important decisions that affect the prosperity of the business. However, the effectiveness of the owner's gut feel, when combined with facts, can dramatically increase the accuracy of management decisions.

### Profit Plan

With a well-considered profit plan, out-of-line conditions can be detected at the earliest possible date. Corrective action can be taken promptly, eliminating the erosive effect of continuing losses as well as the need to react in a time of crisis. The profit plan also permits the owner to agree upon specific responsibilities with all employees who are in a position to influence sales or costs. Their performance can be evaluated and any deficiencies brought to their attention so that they can participate in the development of corrective action plans. As a further plus, the disciplined thinking about the future will permit you to foresee many problems before they occur and assist you in anticipating opportunities in your market that will permit you to build your business for greater sales and profit.

EXHIBIT 1

WESTERN APPLIANCES, INC.

SALES AND EXPENSE FORECAST
JANUARY 1 TO DECEMBER 31, 1980

| | 1979 ACTUAL | 1979 (% SALES) | 1978 ACTUAL | 1978 (% SALES) | INDUSTRY (% SALES) | REVISED 1980 FORECAST |
|---|---|---|---|---|---|---|
| Sales | $1,200,000 | 100.0% | $1,080,000 | 100.0% | 100.0% | $1,400,000 |
| Cost of Sales | 960,000 | 80.0% | 880,000 | 81.5 | 81.8 | 1,120,000 |
| Gross Profit | $ 240,000 | 20.0% | $ 200,000 | 18.5% | 18.2% | $ 280,000 |
| Operating Expenses | | | | | | |
| Salary-Owner | $ 24,000 | 2.0% | $ 20,000 | 1.9% | 1.7% | $ 26,000 |
| Salary-Office Manager | 17,000 | 1.4 | 16,000 | 1.5 | (Office Sal: 4.9%) | 18,000 |
| Salaries-Salesmen | 12,000 | 1.0 | 11,000 | 1.0 | (Selling & Deliv. | 12,000 |
| Commissions-Salesmen | 24,000 | 2.0 | 22,000 | 2.0 | Expense: 7.6%) | 28,000 |
| Salaries-Warehouse | 22,000 | 1.8 | 18,000 | 1.7 | | 23,000 |
| Salaries-Clerical | 12,000 | 1.0 | 10,000 | 0.9 | | 14,000 |
| Payroll Taxes | 9,000 | 0.8 | 8,000 | 0.7 | | 10,000 |
| Employee Benefits | 8,000 | 0.7 | 6,000 | 0.6 | | 9,000 |
| Rent | 9,000 | 0.8 | 9,000 | 0.8 | 0.7 | 10,000 |
| Utilities | 4,000 | 0.3 | 3,000 | 0.3 | | 4,000 |
| Telephone | 4,000 | 0.3 | 2,000 | 0.2 | | 3,000 |
| Supplies | 2,000 | 0.2 | 1,000 | 0.1 | | 2,000 |
| Advertising and Promotion | 13,000 | 1.1 | 12,000 | 1.1 | | 15,000 |
| Travel and Entertainment | 13,000 | 1.1 | 10,000 | 0.9 | | 13,000 |
| Freight | 16,000 | 1.3 | 16,000 | 1.5 | | 18,000 |
| Professional Fees | 5,000 | 0.4 | 4,000 | 0.4 | | 5,000 |
| Depreciation | 6,000 | 0.5 | 5,000 | 0.5 | 0.5 | 8,000 |
| Total Operating Expenses | $ 200,000 | 16.7% | $ 173,000 | 16.0% | | $ 218,000 |
| Profit Before Interest and Taxes | $ 40,000 | 3.3% | $ 27,000 | 2.6% | | $ 62,000 |
| Interest | 15,000 | 1.3 | 12,000 | 1.1 | | 17,000 |
| Profit Before Income Taxes | $ 25,000 | 2.1% | $ 15,000 | 1.4% | 2.5% | $ 45,000 |
| Income Taxes | 6,000 | 0.5 | 4,000 | 0.4 | | 15,000 |
| Net Profit | $ 19,000 | 1.6% | $ 11,000 | 1.1% | | $ 30,000 |

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